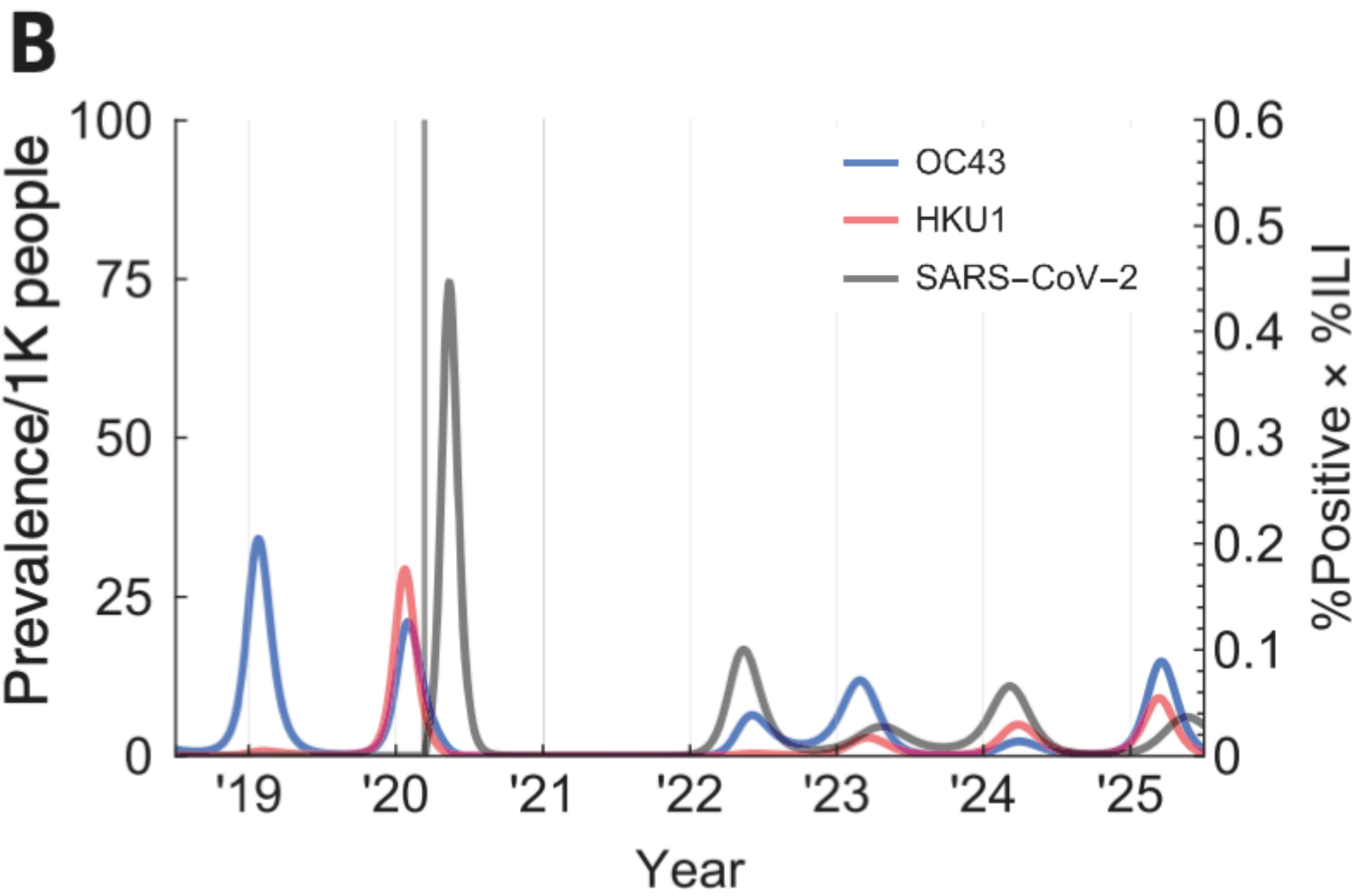
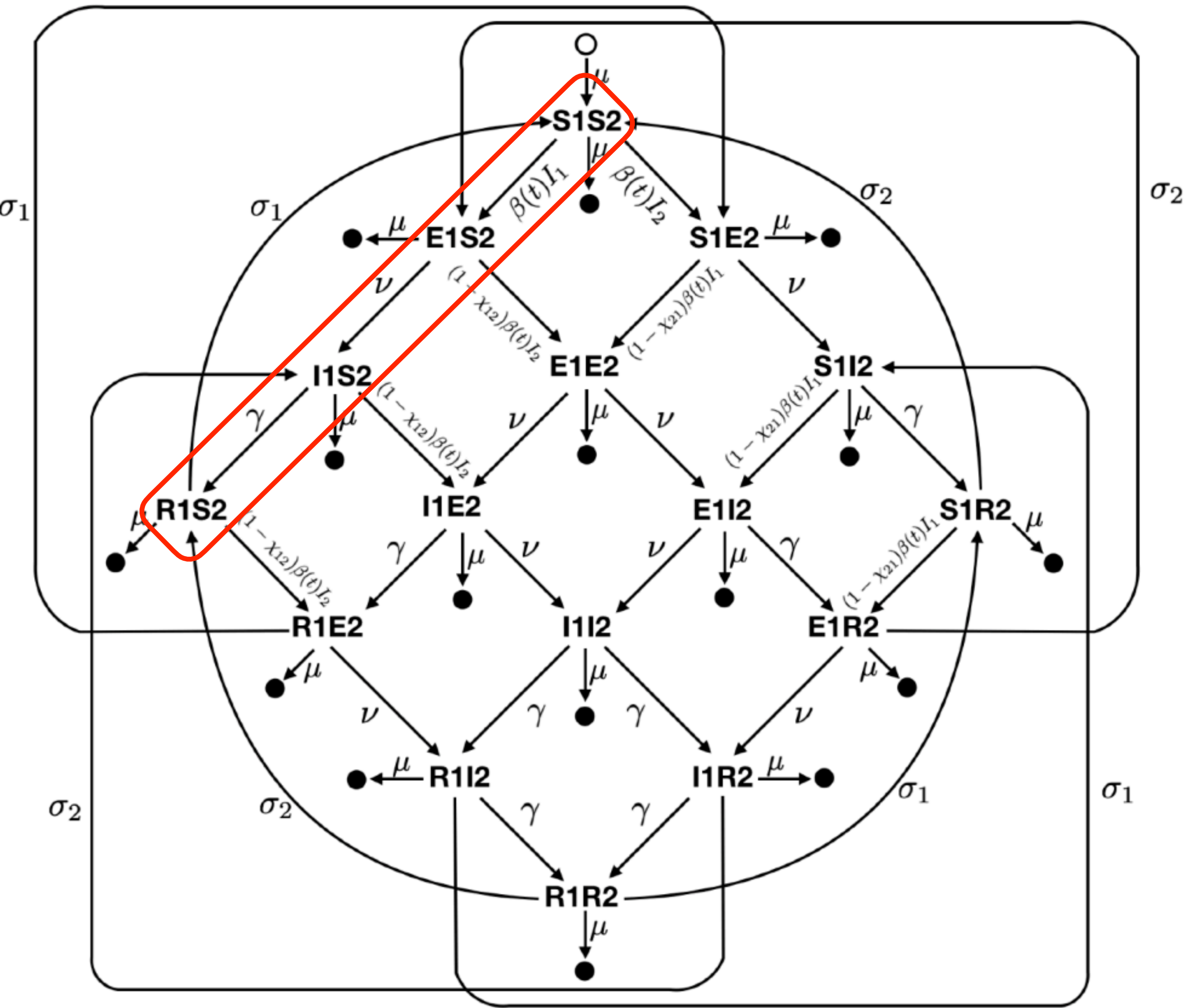
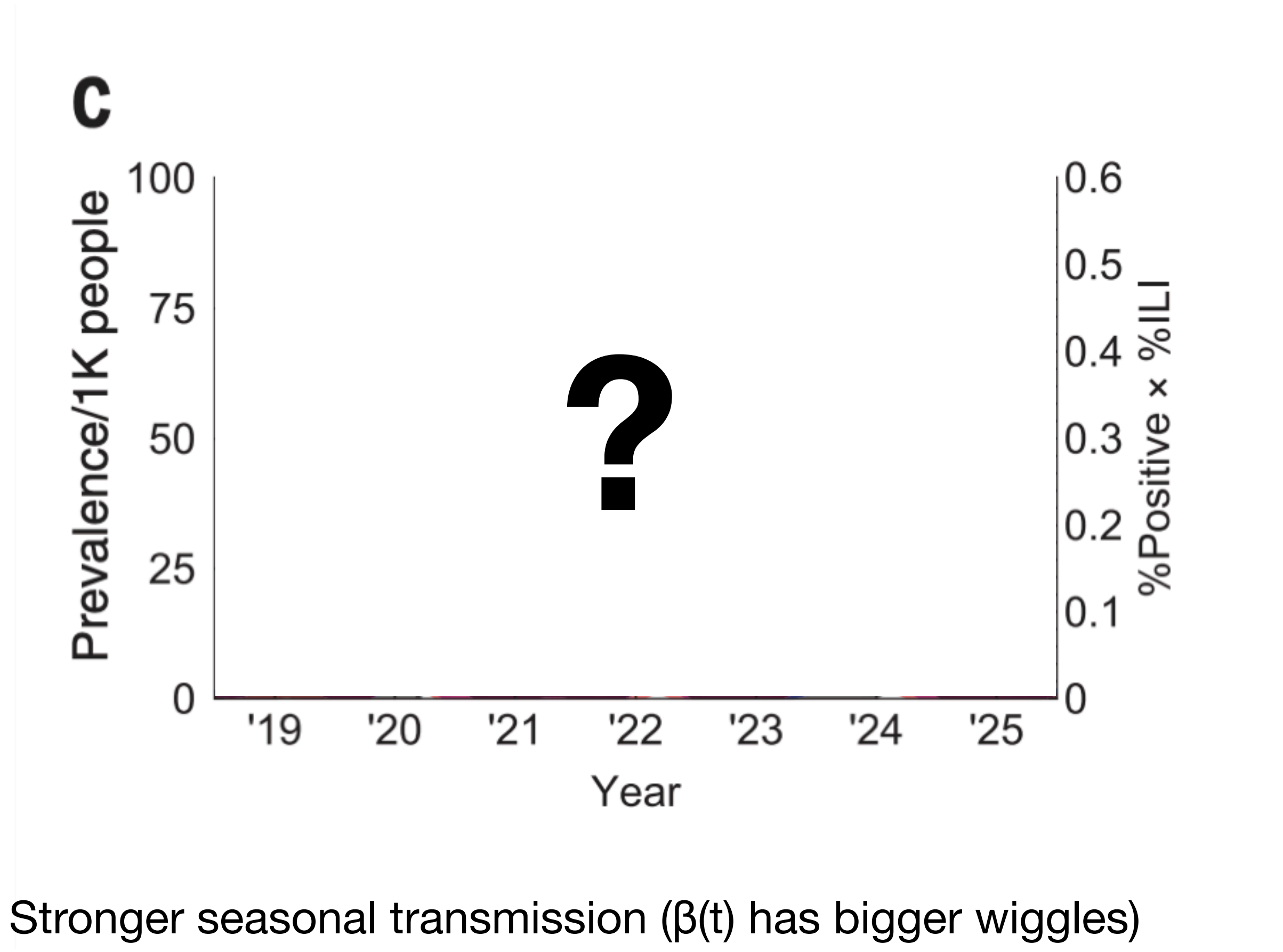
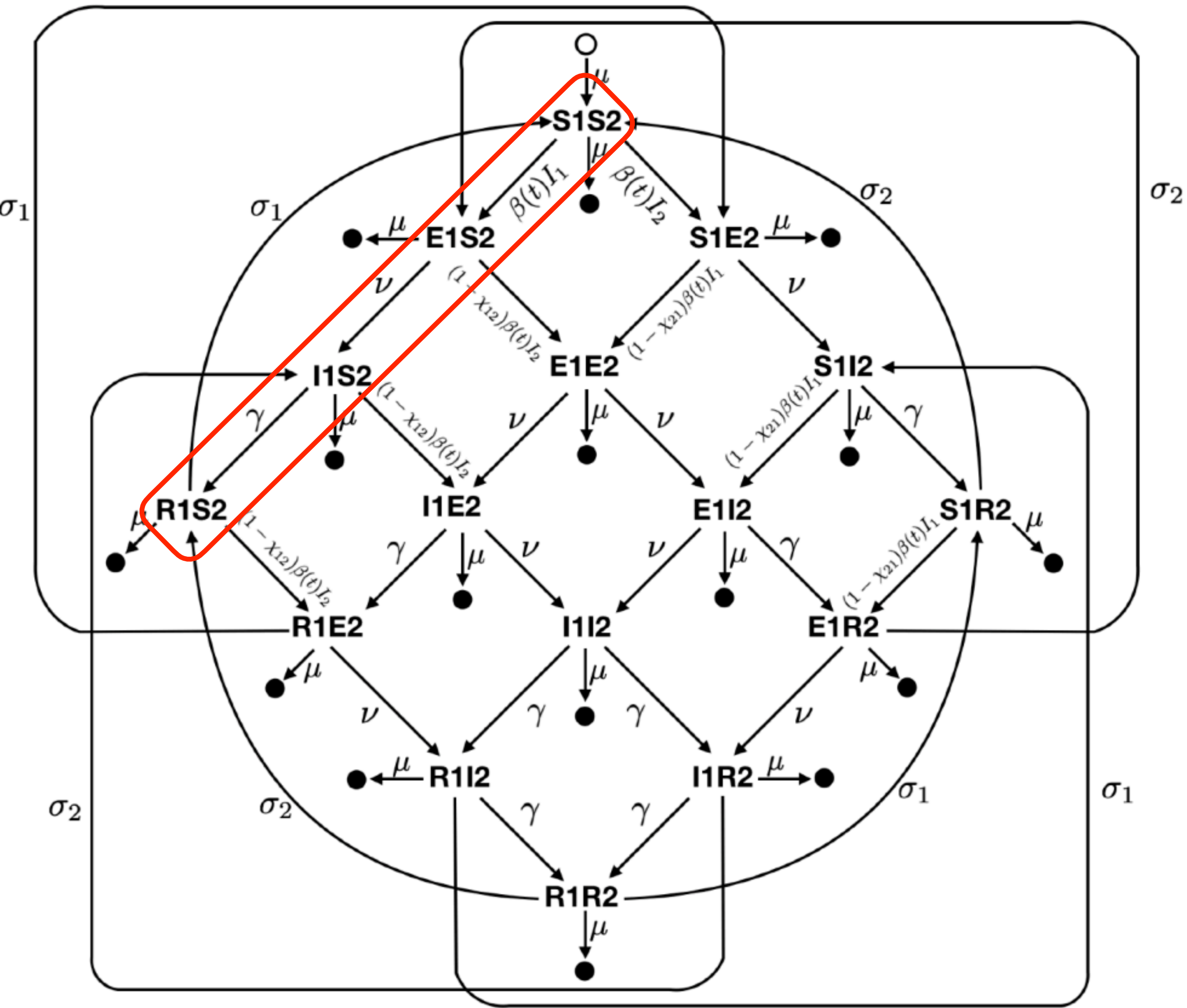


# The full model



Longer-lasting immunity ( $1/\sigma = 104$  weeks) can yield biennial outbreaks

# The full model



Stronger seasonal transmission ( $\beta(t)$  has bigger wiggles)